

AMENDMENTS TO THE CLAIMS

Please cancel claims 9-17 and amend claims 18-20 as shown in the following Listing of Claims.

Listing of Claims

Claim 1 (original): A display system comprising:

- a base;
- an electric motor supported by said base;
- a shaft extending from said motor and operable so as to rotate when power is applied to said motor;
- an elongated, generally planar display assembly center mounted to said shaft so that said display assembly rotates as said shaft rotates;
- a light array mounted to an end portion of said display assembly so as to sweep out a generally cylindrical path as said display assembly rotates;
- an elongated, generally planar control assembly fixedly mounted to said base between said motor and said display assembly, said control assembly configured to accommodate said shaft; and
- an inductive coupling adapted to provide electrical communications between said control assembly and said display assembly.

Claim 2 (original): The display system according to claim 1 further comprising:

- a first switch located on said control assembly configured to transfer power from a power source to said inductive coupling; and
- a power block located on said display assembly configured to transfer power from said inductive coupling to said display assembly.

Claim 3 (original): The display system according to claim 2 further comprising:

- a first processor located on said control assembly and operable to generate a plurality of display commands;
- a second switch located on said control assembly and in electrical communications with said first processor, said second switch configured to transfer said display commands to said inductive coupling;
- a second processor located on said display assembly; and
- a data block located on said display assembly configured to transfer said display commands from said inductive coupling to said second processor,
- said second processor operable to transfer display data to said light array according to said display commands.

Claim 4 (original): The display system according to claim 3 further comprising a sensor output responsive to a position of said display assembly relative to said control assembly, said first processor in communications with said sensor output so as to generate a trigger command to said second processor, said trigger command incorporating a variable trigger delay, said trigger command indicating the apparent position of a pixel display.

Claim 5 (original): The display system according to claim 4 further comprising a push button switch operable in conjunction with a menu presented on said pixel display so as to set an operational mode.

Claim 6 (original): The display system according to claim 5 further comprising a plurality of display language instructions for display specific tasks, said display language instructions interpreted by said first processor so as to generate said display commands.

Claim 7 (original): The display system according to claim 3 wherein said inductive coupling comprises:

a first inductive coupler mounted on said display assembly concentric with said shaft; and

a second inductive coupler mounted on said control assembly concentric with said shaft, said first inductive coupler and said second inductive coupler maintained at a fixed distance apart.

Claim 8 (original): The display system according to claim 4 wherein said sensor comprises:

a Hall-effect sensor mounted on said control assembly; and

a magnet mounted on a base portion of said shaft so that said magnet repeatedly passes under said Hall-effect sensor as said shaft rotates.

Claims 9-17 (canceled)

Claim 18 (currently amended): The A display method according to claim 18 comprising the steps of:

describing a pixel display with a display instruction;
interpreting said display instruction so as to create a display command;
generating a data signal responsive to said display command;
deriving a plurality of column data responsive to said data signal;
rotating a display assembly about an axis so that a light array mounted on said display assembly sweeps along an arc surface;
modulating said light array with said column data so as to create a viewable area of said pixel display across at least a portion of said arc surface;
combining a power source and said data signal into a waveform;
inductively coupling said waveform to said display assembly;
filtering display assembly power from said waveform; and
decoding said data signal from said waveform,

wherein said waveform is a square wave, said data signal is a plurality of bits and said combining step comprises the substeps of switching said power source so as to generate said square wave, interrupting said square wave for a first time period in response to each of said bits that is a one, and interrupting said square wave for a second time period in response to each of said bits that is a zero, and

wherein said square wave has a time period of T and said first time period is about 10T and said second time period is about 20T,

said decoding step comprising the substeps of:

generating a zero bit if said square wave ceases for a time period greater than 15T; and generating a one bit if said square wave ceases for a time period less than 15T.

Claim 19 (currently amended): ~~The A display method according to claim 16 comprising the further steps of:~~

describing a pixel display with a display instruction;
interpreting said display instruction so as to create a display command;
generating a data signal responsive to said display command;
deriving a plurality of column data responsive to said data signal;
rotating a display assembly about an axis so that a light array mounted on said display assembly sweeps along an arc surface;
modulating said light array with said column data so as to create a viewable area of said pixel display across at least a portion of said arc surface;
combining a power source and said data signal into a waveform;
inductively coupling said waveform to said display assembly;
filtering display assembly power from said waveform;
decoding said data signal from said waveform;
sensing a trigger position of said display assembly;
adding a variable delay to said trigger position so as to create a virtual trigger position;
initiating said modulating step in response to said virtual trigger position; and
adjusting said variable delay so as to position said viewable area.

Claim 20 (original): The display method according to claim 19 comprising the further steps of:

designating a front position for said pixel display;
calculating said viewable area from a rotational speed of said display assembly and a number of columns of said pixel display; and
determining said variable delay from said viewable area and said trigger position so as to position a center of said viewable area at said front position.